

C5769 Log Data Report

Borehole Information:

Borehole:			C5769		Site:		216-U-10		
Coordinates (WA St Plane)		GWL¹ (ft):		None		GWL Date:		05/13/08	
North (m)	East (m)	Drill Date	TOC Elevation	Total Depth (ft)	Type				
Not available	Not available	Not available	Not available	Not available	Percussion				

Casing Information:

Casing Type	Stickup (ft)	Outer Diameter (in.)	Inside Diameter (in.)	Thickness (in.)	Top (ft)	Bottom (ft)
Welded steel	0.5	7	5 3/4	5/8	0.5	20

Borehole Notes:

The logging engineer measured the casing diameter with a caliper and steel tape. All log data are referenced to the ground surface.

Logging Equipment Information

Logging System:	Gamma 4L		Type: Serial No.:	SGLS HpGe (60%) 47TP32211A
Effective Calibration Date:	12/31/07	Calibration Reference:	HGLP-CC-027	
		Logging Procedure:	HGLP-MAN-002, Rev. 0	

Spectral Gamma Logging System (SGLS) Log Run Information:

Log Run	1	2 Repeat		
Date	05/13/08	05/13/08		
Logging Engineer	Spatz	Spatz		
Start Depth (ft)	19.0	7.5		
Finish Depth (ft)	0.0	5.5		
Count Time (sec)	200	200		
Live/Real	R	R		
Shield (Y/N)	N	N		
MSA Interval (ft)	0.5	0.5		
Pre-Verification	DL331CAB	DL331CAB		
Start File	DL341000	DL341039		
Finish File	DL341038	DL341043		
Post-Verification	DL341CAA	DL341CAA		
Depth Return Error (in.)	- 0.5	0		
Comments	Fine gain adjustment after file -039	No fine gain adjustment		

Logging Operation Notes:

Logging was conducted with a centralizer on the sonde. All measurements are referenced to ground surface.

Analysis Notes:

Analyst:	Henwood	Date:	06/04/08	Reference:	GJO-HGLP 1.6.3, Rev. 0
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Pre- and post-run verifications for the logging system were performed before and after each day's data acquisition. The acceptance criteria were met.

A casing correction for a 5/8-in. thick casing was applied to the SGLS data.

SGLS spectra were processed in batch mode using APTEC SUPERVISOR to identify individual energy peaks and determine count rates. Concentrations were calculated with an EXCEL worksheet template identified as G4LDec07.xls using efficiency functions and corrections for casing, dead time, and water as determined from annual calibrations.

Results and Interpretations:

Cs-137 was detected from 2.5 to 8 ft and at a few locations between 10 and 15 ft. The maximum Cs-137 concentration was measured at approximately 460 pCi/g at 4.5 ft.

Repeat sections acquired for the logging system indicate good repeatability.

List of Log Plots:

Depth Reference is ground surface

Manmade Radionuclides

Natural Gamma Logs

Combination Plot

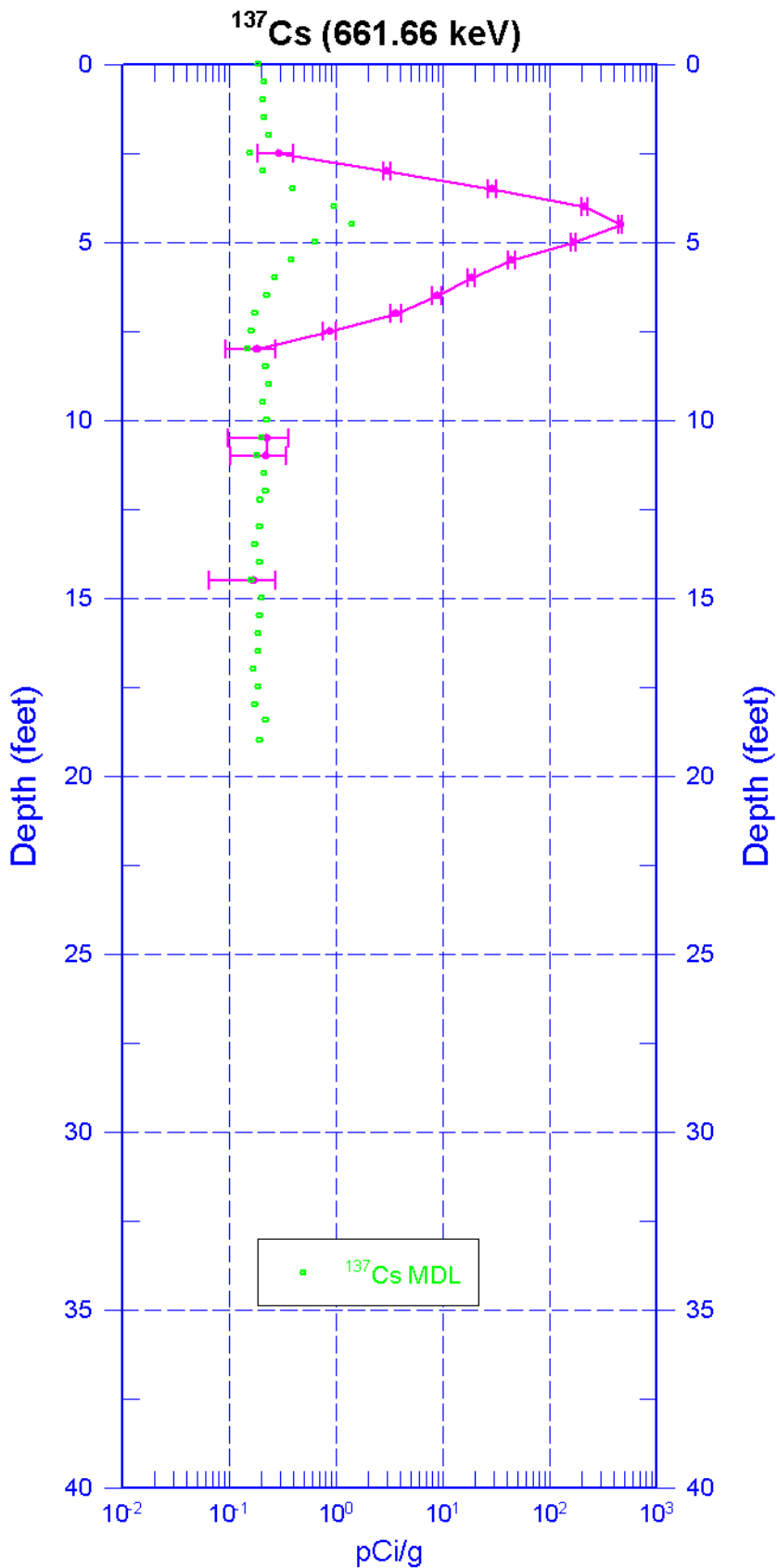
Total Gamma & Dead Time

Repeat of Manmade Radionuclides

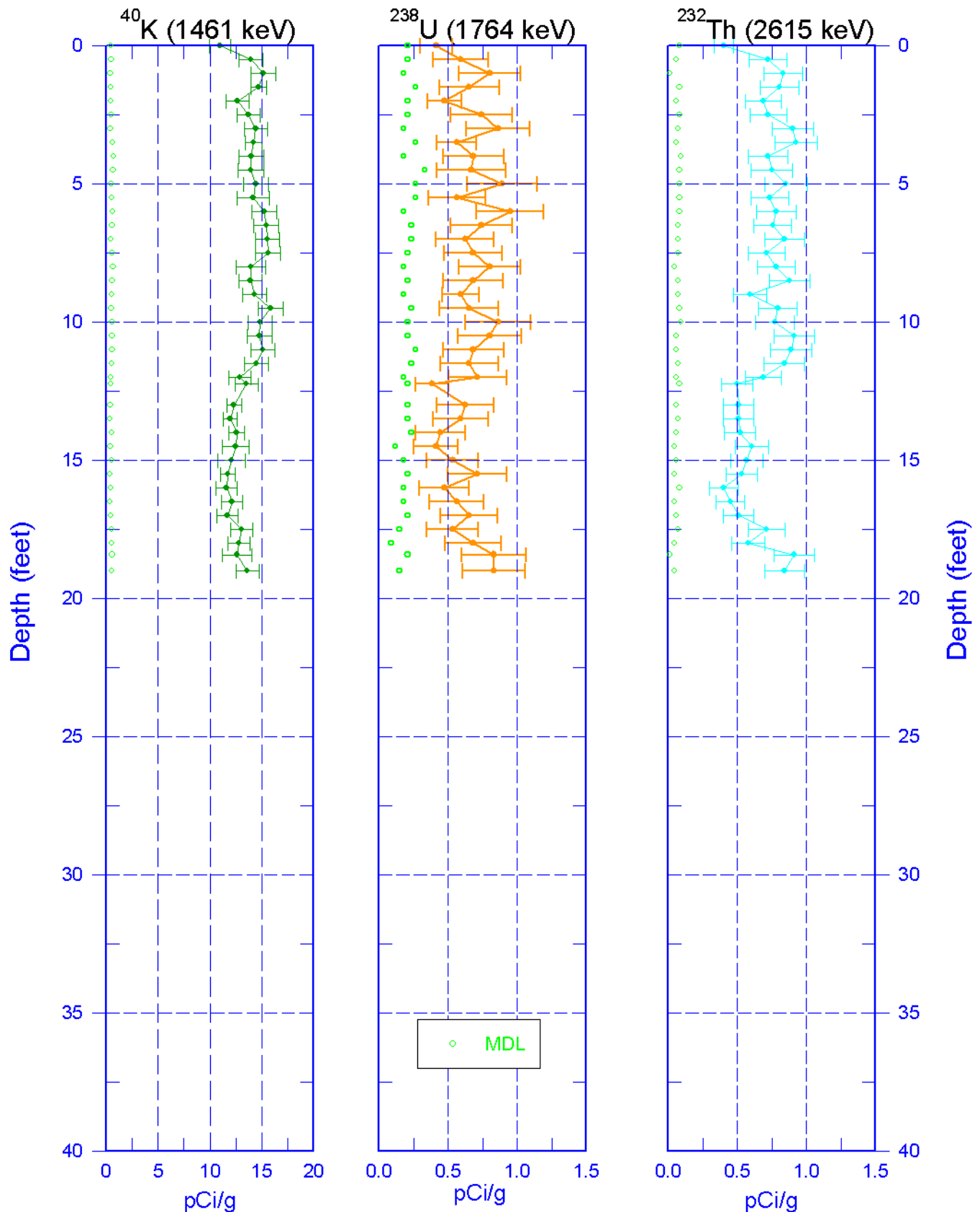
Repeat of Natural Gamma Logs

¹ GWL – groundwater level

C5769 Manmade Radionuclides

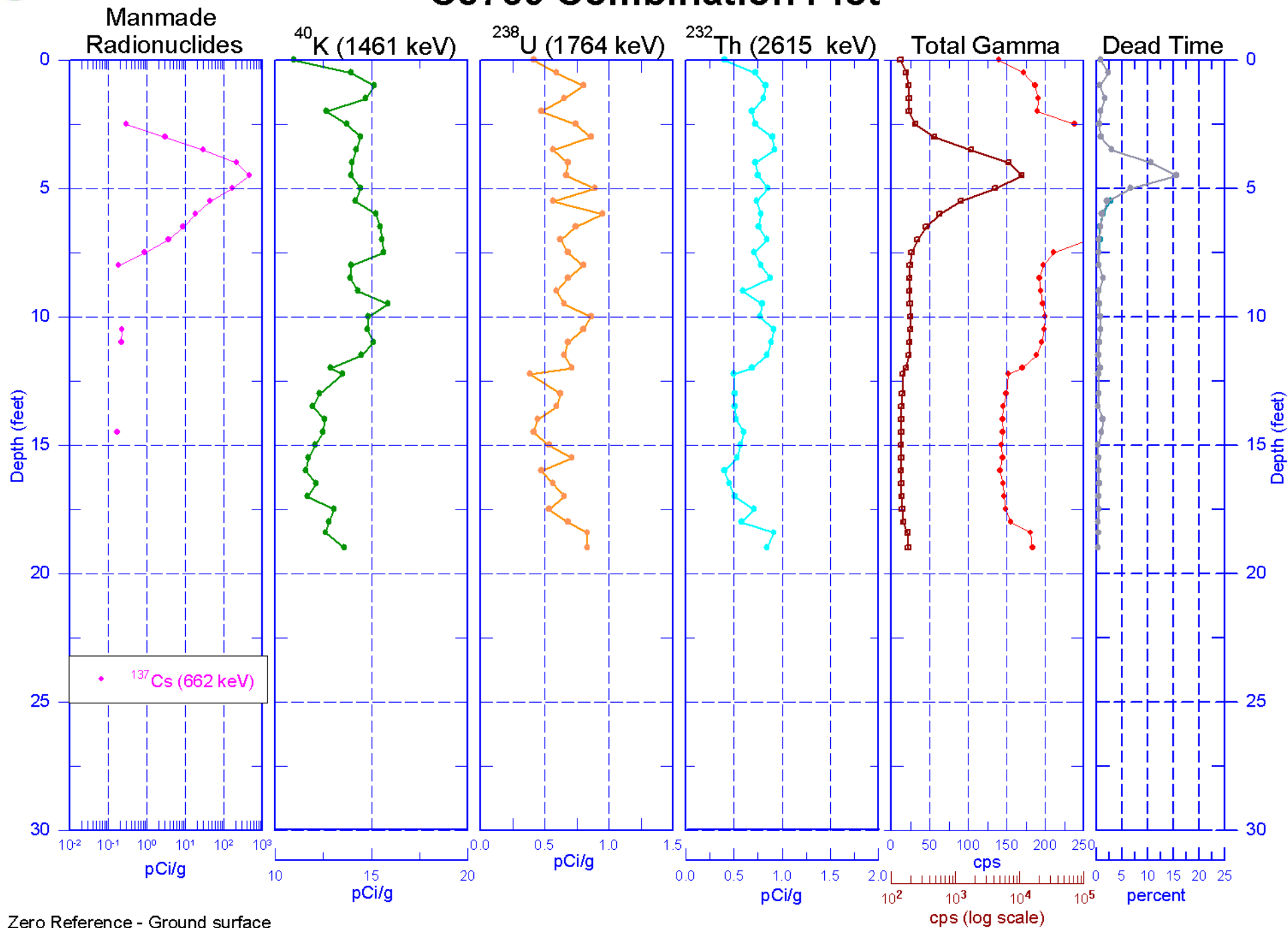


C5769 Natural Gamma Logs

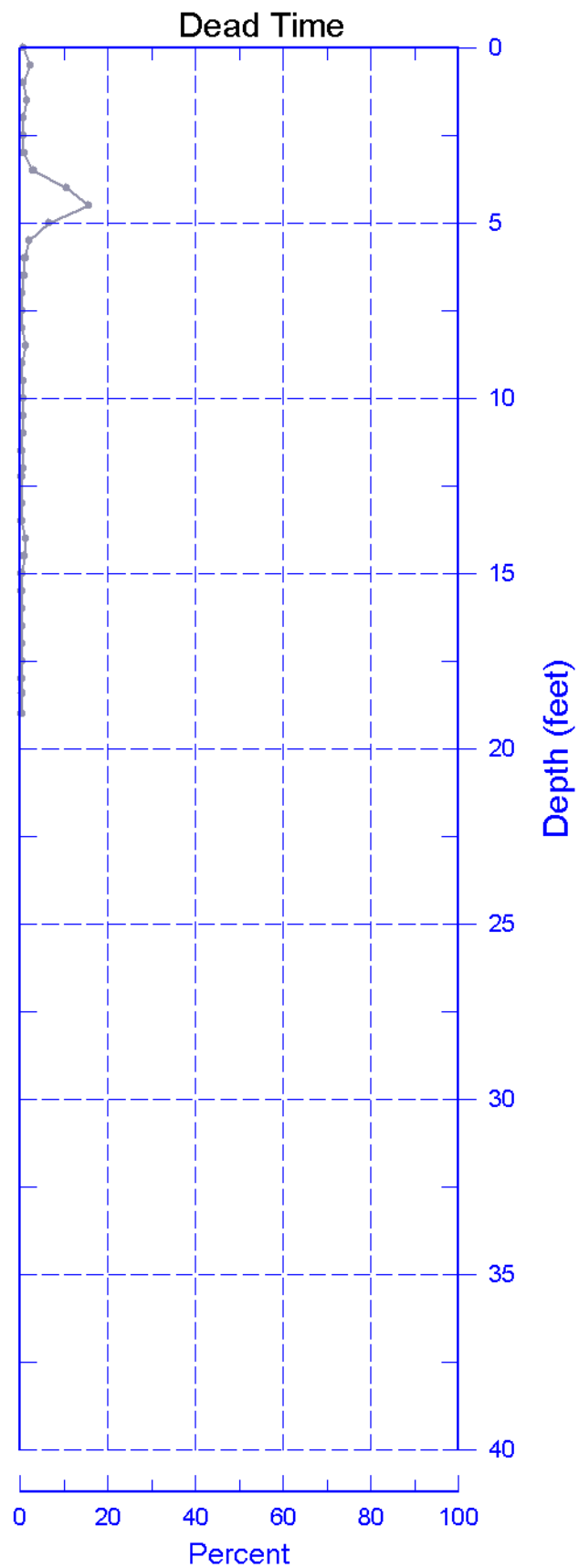
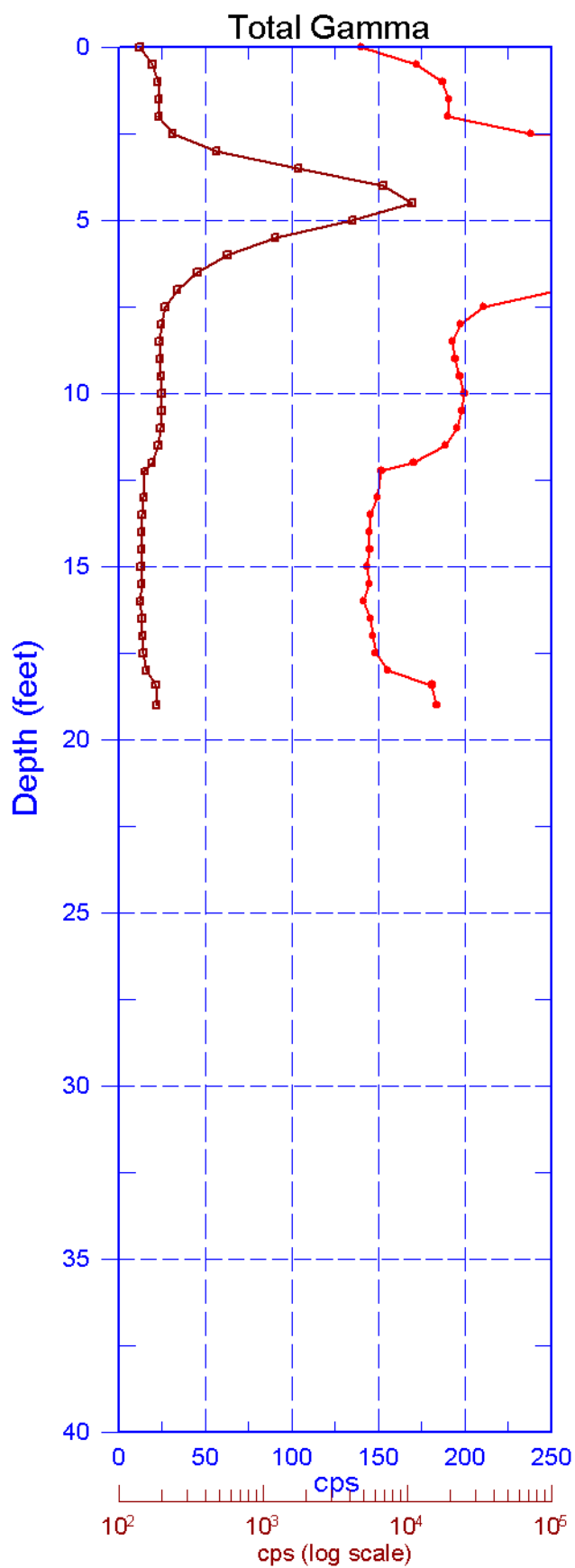


Zero Reference - Ground surface

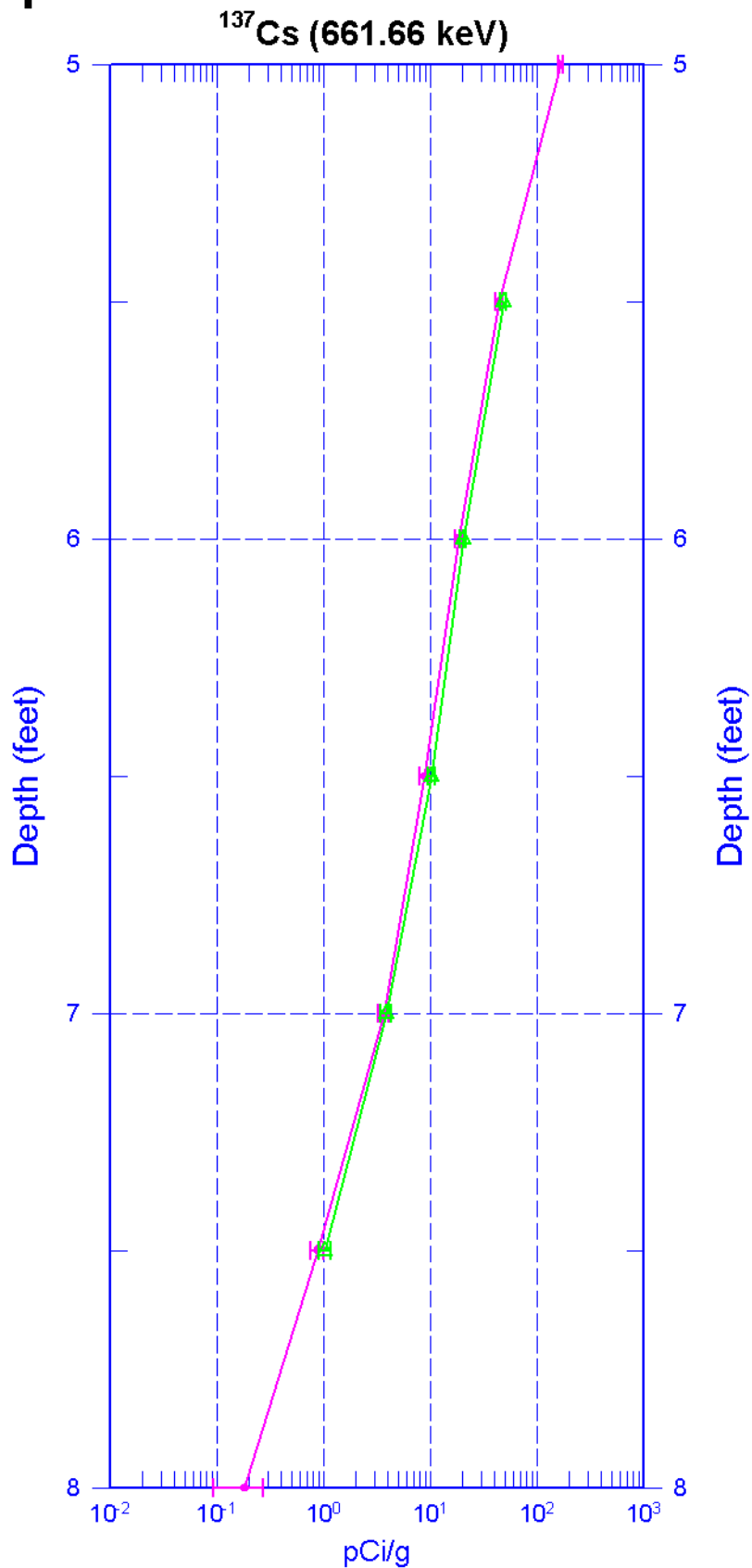
C5769 Combination Plot



Total Gamma & Dead Time



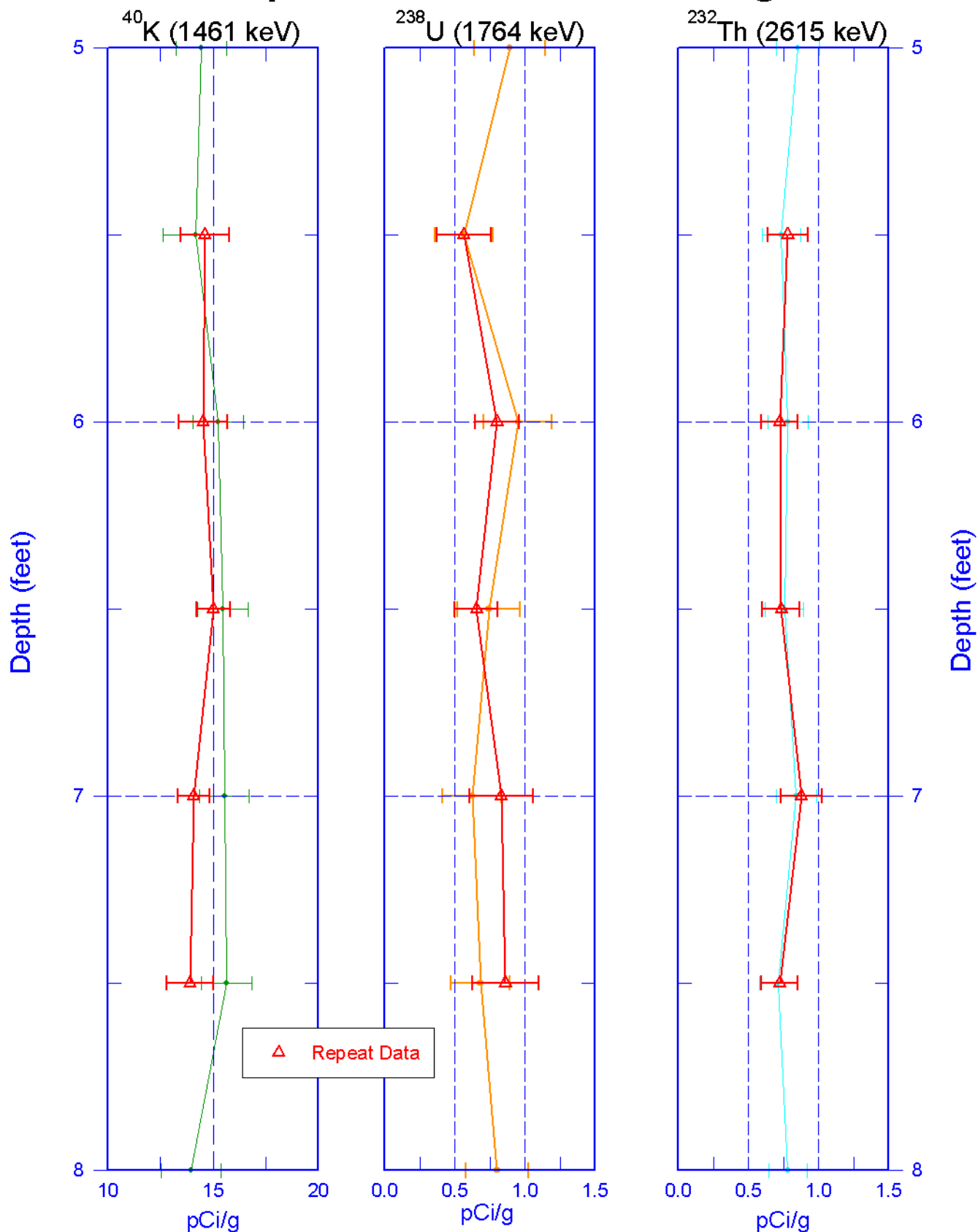
C5769 Repeat of Manmade Radionuclides



Zero Reference - Ground surface

C5769

Repeat of Natural Gamma Logs



Zero Reference - Ground surface